SMAP-Canada workshop

27-28 October 2015

Hotel Holiday Inn South 1330 Pembina Highway, Winnipeg, Manitoba

Meeting objectives related to:

Overall status of the SMAP mission and its products.

Status of the Canadiana SMAP projects, and optimize collaborations between all the sub-projects.

Planification of Canadian field campaigns as part of SMAP Cal-Val.

Level 2/3/4 Beta release, data availability, and outreach.

Tuesday, October 27th, 08:30 to 12:00

- (08:30) Welcome and agenda (Powers, AAFC, Belair, EC)
- (08:40) Mission status (Entekhabi, MIT, Yueh, JPL)
- (09:00) Level-1 radiometer products (Piepmeier or Misra, JPL)
- (09:15) Level-1 radar products (West, JPL)
- (09:30) Level-2 passive soil moisture products (Chan, JPL)
- (09:45) Level-2 active/passive soil moisture products (Entekhabi, MIT)
- (10:00) Break
- (10:15) Freeze / Thaw products (Derksen, EC)
- (10:45) Model value-added products (Reichle, NASA/GSFC)
- (11:15) Discussion on overall status of SMAP mission and products (all)

(12:00 to 13:00) **Lunch**

Tuesday, October 27th, 08:30 to 12:00

- (13:00) Ramata Magagi (U. Sherbrooke): Retrieving soil moisture and vegetation parameters from L and C-Band microwave data.
- (13:30) Paul Bullock (U. Manitoba): Validation of Satellite-derived Soil Moisture Products for Operational Use.
- (14:00) Heather McNairn (AAFC): Soil Moisture Monitoring for Canadian Agriculture: Exploiting RADARSAT-2 and Preparing for the Soil Moisture Active Passive (SMAP) Mission.
- (14:30) Aaron Berg (Guelph University): Improved soil moisture retrieval and freeze/thaw state indicators over several Canadian ecosystems.
- (15:00) Chris Derksen (EC): Freeze/Thaw retrieval from SMAP.
- (15:30) Alain Royer (Sherbrooke University): Passive microwave soil freeze/thaw monitoring cal/val for the SMAP mission.
- (16:00) Monique Bernier (INRS-ETE): Freeze/Thaw cycle monitoring using multi-scale SMAP products and hydrothermal modelling over Canadian tundra
- (16:30) Jing Chen (U. Toronto): Assimilation of SMAP data in an ecosystem model to improve water and carbon cycle simulations

Social dinner (location TBD)

Wednesday, October 28th, 08:30 to 12:30:

- (08:30) Post-launch cal-val activities (Jackson, USDA, Colliander, JPL)
- (09:00) Plans for F/T field campaign SLAPEX (Berg, Guelph, Derksen, EC)
- (09:20) Plans for 2016 field campaign in Manitoba (Powers and McNairn, AAFC)
- (09:40) Discussion concerning the field campaigns
- (10:15) Marco Carrera (EC): Development, Implementation, and Dissemination of km-scale Soil Moisture and Freeze/Thaw Products Based on SMAP Passive and Active Observations
- (10:45) SMAP data archives (Leon, NSIDC)
- (11:15) Discussion on data products and outreach
- (11:45) Wrap up, synergy, collaborations, outstanding actions
- (12:30) Scientific meeting adjourn.

Wednesday, October 28th, 13h30 to 17:00 (Canadian users meeting)

- (13:30) Crop yield forecasting and drought monitoring (C. Champagne, AAFC)
- (13:50) Applications related to flood forecasting (J. Jacobs, U. New Hampshire)
- (14:10) Climate and meteorological applications (S. Belair, EC)
- (14:30) Update on the SMAP Applications Plan (V. Escobar, NASA-GSFC)
- (14:50) Break
- (15:10) Short presentations (with or without slides support) by each of the users present at the meeting to highlight their interests, needs, and questions regarding SMAP and the different Canadian projects.
- (16:00) Wrap-up... outstanding actions and issues
- (16:30) Meeting adjourned.